

## DETAILED ACTION

### *Information Disclosure Statement*

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### *Claim Objections*

2. **Claim 9** is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 8 includes blending OR not blending in its scope. Therefore claim 9 does not further limit claim 8.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillamot (FR 2,638,064-English Translation).

7. Guillamot discloses a process for producing a vegetable or fruit product, comprising the steps of:

- a. Crushing, chopping or slicing a vegetable or fruit into pieces (page 1, lines 39-44);
  - b. Blanching the vegetable or fruit pieces at a temperature of 60 to 90° C (page 1, lines 43-44); and
  - c. Holding the blanched vegetable pieces in the presence of an endo-acting pectinase activity at a temperature of 60 to 90° C (page 1, line 45-50, page 2, lines 9—10).
8. Although Guillamot does not explicitly disclose the size that the fruit or vegetable pieces are cut to, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the particle size for the intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).
9. Regarding claim 9, Guillamot further discloses blending the blanched vegetable or fruit pieces (claim 10- vigorously mixed, and page 3, line 44-homogenized).
10. Regarding claim 10, Guillamot discloses that the endo-acting pectinase activity can be polygalacturonases or pectin lyases (page 2, lines 9-10).
11. **Claims 11,12 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillamot as applied to claim 8 above in view of Andersen (WO 99/27083).

12. Andersen discloses pectate lyases derived from *Bacillus sp.* such as the pectate lyase derived from *Bacillus licheniformis* disclosed in SEQ:ID NO:1 (claim 1, claim 3, Sequence listing NO. 8).

13. It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of Guillamot with the use of the specific enzyme preparations as disclosed by Andersen, as the enzymes of Andersen are useful for juice processing (claim 28), and further, all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

14. **Claims 13 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillamot as applied to claim 8 above in view of Glad US2006/0089283A1.

15. Glad discloses pectate lyases derived from *B. Subtilis* ([0004]), wherein the pectate lyase has the amino acid sequence SEQ ID NO:2 (see SEQ ID NO:1 of Glad).

16. It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of Guillamot with the use of the specific enzyme preparations as disclosed by Glad, because all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination

would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

17. **Claims 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillamot as applied to claim 8 above in view Subramaniam (US 6,004,590).

18. Subramaniam discloses a process for producing an enzymatically processed vegetable product from root vegetables, such as carrots, or fruits, such as tomatoes (column 2, lines 28-38).

19. It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of Guillamot with the use of the specific root vegetables or fruits as disclosed by Subramaniam, because the method of Guillamot discloses using fruits and vegetables in general and all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

20.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW KRAUSE whose telephone number is (571)270-7094. The examiner can normally be reached on 7:30-5, off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on (571)272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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